

ABSTRACT

[0055] A lifter including tongs; an electric motor having a stator, a rotor, and one or more windings and a shaft operatively coupled with the first tongs for actuating the first tongs to an open position for receiving a load and actuating the first tongs to a closed position for engaging the load; and a vector drive controller electrically coupled to the electric motor for controlling the operation of the electric motor. A method of handling a load with a motorized lifter including at least one set of tongs and an electric motor coupled to the tongs, the method including moving the tongs of the motorized lifter to a home position by operation of the electric motor, wherein the electric motor is controlled by a vector drive controller; moving the tongs out of the home position; placing the tongs over the load; and positioning the tongs against the load by operation of the vector drive controlled electric motor so as to frictionally engage the load with the tongs.